BARA, Nicolae, ing.; AURELIAN, Z.; RUSU, Adrian

Preparations for winter. Constr Bic 16 no.769:2,3
3 Oct '64

1. Head of the Office of Production, "Ceramica" Enterprise of Construction Materials, Bucharest (for Bara).

AURELIAN, Z.

Two objectives: productivity and quality. Constr Buc 17 no.784:1,2 16 Ja '65.

SIRBU, C.; AURELIAN, Z.

At the Tandarei Plant for Tiles and Bricks. Constr Buc 17 no. 802:3 22 My '65.

AURIAN, J.

TECHNOLOGY

REVISTA CONSTRUCTILOR SI A MATERIALELOR DE CONSTRUCTII. Vol. 10, no. 8, Aug. 1958.

Utilization of slags from boilers and cinders from power plants in the construction industry. p.447.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 5, ~~May~~ March 1959, Unclass.

AURIAN, J.; GHEORGHITA, S.

Technical and economic comparative analysis of different types of walls for dwelling buildings. p. 162.

REVISTA CONSTRUCTIILOR SI A MATERIALELOR DE CONSTRUCTII. (Asociatia Stiintifica a Inginerilor si Tehnicienilor din Rominia si Ministerul Constructiilor si al Materialelor de Constructii) Bucuresti, Rumania. Vol. 11, no. 4, Apr. 1959.

Monthly List of East European Accessions (EEAI) LC/ vol 8 no. 8, Aug. 1959

Uncl.

AULICH, Jan

Photoresistors sintered in contact with leading-in electrodes.
Slaboproudy obzor 22 no.7:397-401 '61.

1. Fyzikalni ustav Ceskoslovenske akademie ved, Praha.

(Electrodes) (Photoelectricity)

AURELIAN, J., ing.; POPESCU, T., ing.

Determining the quotas for indirect expenses in construction by the aid of the correlation method. Rev constr si mat constr 16 no.3:138-145 Mr '64

RANDVEE, T.Ya.; REMMA, Kh.A. [Remma, H.]; AURISTE, I.N.

Checking the properties of cellular concrete by testing samples drilled out of large blocks. Stroi.mat. 8 no.10:38-39 O '62. (MIRA 15:11)

(Lightweight concrete—Testing)

AULOVA, Jirina

Tumors of the locomotor organs of ligamentous origin. Acta chir. orthop.traum.cech. 28 no.3:248-251 Je '61.

1. II. ortopedicka klinika v Praze, prednosta prof. dr. O. Hnevkovsky.

(BONE AND BONES neoplasms) (JOINTS neoplasms)
(FIBROSARCOMA case reports)

AUROV, A.P.

CA

2

Kinetics of the reaction of lithium with ethyl chloride vapor. V. A. Shushunov and A. P. Aurov. *Zhur. Fiz. Khim.* 23, 1197-202(1949).—Li was sublimed from vapor on the inside of a glass bulb of 4 cc. EtCl was introduced, and the gas pressure P was detd. with a membrane manometer. Below 30°, after a latent period τ, P decreases in time, and eventually LiEt, m. 95°, forms. The τ was, e.g., at P = 6 mm. Hg 410 and 1.42 sec. at −25° and +20°, resp., and at 10 mm. 307 and 1.73 at −20° and +11°, resp. After τ, the decrease of P was proportional to P^n, t being time and n = 1.4 at −25° and 1.1 at +20°. At this stage, the apparent energy of activation was smaller than for τ, presumably because Li was coated by the reaction product and the rate of reaction was reduced by diffusion. Up to 3% O in EtCl does not affect the rate of reaction, but 10% O lowers it because of formation of Li_2O.

J. J. Bikerman

AUROV, A.P.

CA

2

Kinetics of the reaction of magnesium with alkyl halide vapors. V. A. Shushunov and A. P. Aurov. *Doklady Akad. Nauk S.S.S.R.* 68, 713-16(1949).—In the reaction between solid Mg and gaseous RLX(X = Cl, Br, or I), formation of Mg org. compds. accounts for 90–100% of the observed pressure drop Δp; with MeX, it accounts for only 40–50%; the remaining 60–50% of MeX is evidently consumed by the Wurtz reaction. A mechanism based on the 2 reversible reactions: Mg + RX $\rightleftarrows$ MgRX, leads to the rate expression $dx/d\tau = k'_1 a p^{1/n} s^{1/3} - k'_2 x^{1/3}$, where $a p^{1/n}$ represents the surface concn. of the adsorbed RX mols. With $a k'_1 = k_1 e^{-q_1/RT}$, and $k'_2 = k_2 e^{-q_2/RT}$ this becomes $dx/d\tau = (k_1 p^{1/n} e^{-q_1/RT} - k_2 e^{-q_2/RT}) s^{1/3} = \alpha s^{1/3}$, integrated $x = \alpha^3 \tau^3/27$, and $-\Delta p = k_2 \alpha^3/27$. This expression was found applicable to the exptl. kinetic curve with EtCl, 20 mm. Hg, at 60°. The induction period τ, defined as the time, in min., within which p falls by 0.3 mm. Hg, follows $\alpha\tau$ = const., i.e., at const. temp. and $s = 1$, $1/\tau$ is a linear function of p. The variation of τ with the temp. T is given by $\tau e^{-q_1/RT}$ = const., equally confirmed by the expts. The activation energies E_a are found to be, for MeCl 9.0, MeBr 12.5, MeI 8.5, EtCl 11.0, EtBr 13.0, EtI 8.7 kcal./mole. The rate of formation of MgRX increases with the temp. according to Arrhenius' law up to 180°. The rate of decompn. of MgEtBr becomes significant at 200°, and extremely fast at 230°.

N. Thon

AUROV, A.P.
CA

2

Effect of ethers on the velocity of the reaction between magnesium and alkyl halide vapors. V. A. [illegible], A. P. Aurov, and V. A. Gorinov. *Doklady Akad. Nauk S.S.S.R.* 68, 875-7(1949).—The self-accelerating char-
acter of the formation of metal org. compd. between solid
Mg and vapors of MeBr or EtBr, expressed by the auto-
catalytic kinetic law for the observed pressure drop, (
$-\Delta p = bt^2$ (*C.A.* 42, 5318h), is detd. by the difference
ΔE between the activation energy E_1 of the reaction on
the initial Mg surface and on the surface covered by the
reaction product, E_1'. The self-acceleration disappears
when $\Delta E = 0$. In the presence of ethers, the rate of the
heterogeneous reaction, measured by $-\Delta p$, is markedly
accelerated. Thus, at 20°, with EtBr = 10 mm. Hg,
addn. of 1.5 mole % MeOEt increases the rate over 100
times, and 6.1 mole % 10^3 times. Addns. of 0.1
mole % Et_2O or $(iso\text{-}C_5H_{11})_2O$ increase the rate 40 times,
12 mole % 10^3 times. At 60°, with 20 mm. Hg of EtBr,
$-\Delta p$ after 40 min., without ether and with 2.5 and 18
mole % Et_2O, was 0.8, 2.8, and 5.8 mm. Addn. of an
ether evidently lowers both E_1 and E_1', the lowering of E_1
being faster; hence, ΔE tends to zero with increasing amt.
of the ether, and the autocatalysis disappears at a suffi-
cient concn. of the ether. For Et_2O, this limiting amt. is
close to 12, for MeOEt close to 2.5 mole %. The fall of
the activation energy E with increasing amt. of ether is
illustrated by the examples: EtBr with 0.0, 1.5, 6.1, and
26 mole % MeOEt, E = 13, 2.5, 1.9, and less than 1.5
kcal./mole; with the same amts. of Et_2O, E = 13.0,
12.8, 10.0, and less than 1.5; with $(iso\text{-}C_5H_{11})_2O$, 13.0,
12.7, 11.0, and less than 1.5 kcal./mole. At very high
ether contents, the temp. coeff. of the reaction is very small,
thus, in EtBr with 18 mole % Et_2O, the rate increases
only 4 times between −40 and +40°. The reaction be-
tween Mg and MeBr shows the same behavior. In a
liquid mixt. of 80 mole % EtBr and 80 mole % Et_2O,
the temp. coeff. between −40 and +30° is close to unity.
—N. Thon

USSR/Chemistry - Organomagnesium Compounds Jan 51

"Kinetics of the Reaction of Magnesium With Ethyl Bromide Vapors," V. A. Shushunov, A. P. Aurov, Sci Res Inst Chem, Gor'kiy State U

"Zhur Fiz Khim" Vol XXV, No 1, pp 13-19

Developed methods for investigating kinetics of reaction of metals with alkyl halide vapors. Studied in greatest detail reaction of Mg with EtBr, forming MgEtBr, found to proceed autocatalytically with activation energy of 13 kcal/mol (detd from temp coeff of induction period). Induction period decreased in proportion to increase of vapor pressure of alkyl halides.

LC 180T11

AUROV, A. P.

180T12

USSR/Chemistry - Organomagnesium Compounds Jan 51

"Catalysis by Ethers of Reaction of Magnesium With Ethyl Bromide Vapors," V. A. Shushunov, A. P. Aurov, V. A. Gorinov, Sci Res Inst of Chem, Gor'kiy State U

"Zhur Fiz Khim" Vol XXV, No 1, pp 20-23

In reaction of Mg with alkyl halides (in this case EtBr) ethers act as catalysts. Low-rate coeff of reaction at significant concn of ether suggests reaction occurs in diffusion region. Catalytic

180T12

USSR/Chemistry - Organomagnesium Compounds Jan 51
(Contd)

ability of ethers depends on their nature, Me_2O being most effective, Et_2O and iso-Pr_2O about equal, though catalysis with Et_2O gives higher yield of organo-Mg compd.

LC

180T12

KHUDYAKOVA, T.A.; AUROV, A.P.; KRYLOVA, V.I.

Chronoconductometric method for the determination of sodium polymethacrylate, its copolymer with methyl methacrylate and for the analysis of mixtures with NaOH. Zhur.anal.khim. 19 no.9:1137-1141 '64. (MIRA 17:10)

1. Gor'kovskiy politekhnicheskiy institut imeni Zhdanova.

KRESHKOV, A.P.; KHUDYAKOVA, T.A.; AUROV, A.P.; ARBATSKIY, A.P.

Chronoconductometric method for determining maleic anhydride in its copolymer with styrene and sodium styromaleinate. Plast. massy no.7: 51-55 '65. (MIRA 18:7)

L 41322-66 EWT(m)/EWP(t)/ETI IJP(c) JD/WW/JG

ACC NR: AP6019608 (A,N) SOURCE CODE: UR/0048/66/030/002/0217/0219

AUTHOR: Bilibin, L.P.; Aurov, G.; Albov, A.

60
B

ORG: none

TITLE: On the decay scheme of Am-240 /Report, Fifteenth Annual Conference on Nuclear Spectroscopy and Nuclear Structure, held at Minsk, 35 Jan. to 2 Feb. 1965/

SOURCE: AN SSSR, Izvestiya. Seriya fizicheskaya. v. 30, no. 2, 1966, 217-219

TOPIC TAGS: nuclear spectroscopy, gamma spectrum, electron capture, radioactive decay scheme, americium

ABSTRACT: The authors have investigated the γ rays accompanying the K-capture decay of Am^{240} to Pu^{240}. The Am^{240} was obtained from the (d,n) reaction on Pu^{239}, and was deposited on a teflon substrate. The γ ray spectrum was recorded with scintillation spectrometers employing 4 x 4 and 8 x 5 cm NaI (Tl) crystals. The spectrometer employing the 4 x 4 cm crystal was calibrated with Am^{241}, Ce^{144}, Au^{198}, and Co^{60} sources, the absolute activities of which had been measured with a 4π β counter or an ionization chamber. Gamma rays ascribable to Am^{240} were observed at 100, 940, 1040, and 1400 keV. The 100 keV line is attributed to K x radiation. From the intensities of the different γ rays it is concluded that of the electron capture decays of Am^{240}, some 20% go to the 940 keV level in Pu^{240}, 80% go to the 1040 keV level, and 0.1% go to the 1400 keV level. The 1400 keV gamma line was found to be consid-

Card 1/2

ACC NR: AP6019608

ably less intense than reported by R.Glass (NSA, 9, No.24B (1955)) and by R.Glass, R.Carr, and W. Gibson (J. Inorg. Nucl. Chem., 13, 3/4, 181 (1960)). The intensities of the other lines are in satisfactory agreement with the findings of Glass, Carr, and Gibson. Orig. art. has: 2 figures and 1 table.

SUB CODE: 20 SUBM DATE: 00 ORIG. REF: 004 OTH REF: 004

Card 2/2

AUSARKISOVA, A.I.

46

PHASE I BOOK EXPLOITATION SOV/6195

Nauchnaya konferentsiya institutov khimii Akademiy nauk Azerbaydzhanskoy, Armyanskoy i Gruzinskoy SSR. Yerevan, 1957.

Materialy nauchnoy konferentsii institutov khimii Akademiy nauk Azerbaydzhanskoy, Armyanskoy i Gruzinskoy SSR (Materials of the Scientific Conference of the Chemical Institutes of the Academies of Sciences of the Azerbaydzhan, Armenian, and Georgian SSR) Yerevan, Izd-vo AN Armyanskoy SSR, 1962. 396 p. 1100 copies printed.

Sponsoring Agency: Akademiya nauk Armyanskoy SSR. Institut organicheskoy khimii.

Resp. Ed.: L. Ye. Ter-Minasyan; Ed. of Publishing House: A. G. Elkuni; Tech. Ed.: G. S. Sarkisyan.

PURPOSE: This book is intended for chemists and chemical engineers, and may be useful to graduate students engaged in chemical research.

COVERAGE: The book contains the results of research in physical, inorganic, organic, and analytical chemistry, and in chemical engineering, presented at the Scientific Conference held in Yerevan, 20 through 23 November 1957. Three reports of particular interest are reviewed below. No personalities are mentioned. References accompany individual articles.

Card 3/11

2/2

SMADL, Jan; AUSBERGER, František; STARY, Zdeněk; ZEMAN, Miroslav; [illegible], Václav; BRADAC, Svatopluk

Control of railroad operations in a coalfield district. Zel dop tech 13 no.1:Suppl:1-8 '65.

1. Head of the Unit of Operations, Usti nad Labem (for Smadl). 2. Director of the North Bohemian Lignite District (for Ausberger). 3. Head of Transportation Service of the Doly Vitezneho unora National Enterprise (for Stary). 4. Director of the Doly V.I.Lenina National Enterprise, Komorany (for Zeman). 5. Head of Transportation Service of the Coal Preparation Plant, Komorany (for Bradac). 6. Chief of the Most Railroad Junction (for Sikl).

AUSHEV, M.A., dotsent (Stavropol')

Histories of disease require a different formulation. Vrach. delo no.12:1301 D '56. (MIRA 12:10)
(MEDICINE--CASES, CLINICAL REPORTS, STATISTICS)

AUSHEV, N.A., dotsent

Some peculiarities of the clinical treatment of acute pancreatitis. Vrach.delo no.4:413 Ap '57. (MLRA 10:7)

1. Kafedra fakul'tetskoy terapii Stavropol'skogo meditsinskogo instituta.
(PANCREAS--DISEASES)

AUSHEV, N.A., dots., MAZUROVA, A.M.

Acute caterrhal pancreatitis as a complication of influenza.
Vrach.delo no.9:983-985 S'58 (MIRA 11:10)

1. Kafedra fakul'tetskoy terapii (zav.-prof. S.P. Zavodskoy) Stavropol'skogo meditsinskogo instituta.
(INFLUENZA)
(PANCREAS--DISEASES)

AUSHEV, N.I., dotsent

Helminth and protozoa invasions in patients with peptic ulcer.
Vrach. delo no.11:149-150 N '61. (MIRA 14:11)

1. Kafedra fakul'tetskoy terapii (zav. - dotsent N.A.Aushev)
Stavropol'skogo meditsinskogo instituta.
(PROTOZOA, PATHOGENIC) (WORMS, INTESTINAL AND PARASITIC)
(PEPTIC ULCER)

AUSHEV, N.A., dotsent

Role of chronic diseases of the abdominal organs in the course of peptic ulcer. Vrach. delo no.8:10-13 Ag '61. (MIRA 15:3)

1. Kafedra fakul'tetskoy terapii (zav. - dotsent N.A. Aushev) Stavropol'skogo meditsinskogo instituta.
(ABDOMEN--DISEASES) (STOMACH--ULCERS)

AUSHEV, N.A., dotsent; MAZUROVA, A.M.

Use of intravenous infusions of bismuth carbonate. Vrach.delo no.11:147-148 N '62. (MIRA 16:2)

1. Kafedra fakul'tetskoy terapii (zav. - dotsent N.A. Aushev) Stavropol'skogo meditsinskogo instituta.
(BISMUTH—CARBONATE) (INJECTIONS, INTRAVENOUS)

AUSHEV, N.A., dotsent

Causality in medicine. Uch. zap. Stavr. gos. med. inst. 12:318-319 '63. (MIRA 17:9)

1. Kafedra fakul'tetskoy terapii (zav. dotsent N.A. Aushev) Stavropol'skogo gosudarstvennogo meditsinskogo instituta.

Name: AUSHRUNAS, A. I.

Dissertation: Control of pyodermitis at peat and woodworking enterprises of the Lithuanian SSR for the period 1950-1954

Degree: Cand Med Sci

Defended at
~~Affiliation~~ Publication: Acad Sci Lithuanian SSR, Inst Experimental Medicine

~~Defense~~ Date, Place: 1956, Vilnius

Source: Knizhnaya Letopis', No 51, 1956

L 05194-67

ACC NR: AP6012146 SOURCE CODE: UR/0413/66/000/007/0063/0063

AUTHOR: Aushyura, Z. I.

1
B

ORG: none

TITLE: Ellipsograph. Class 42, No. 180361

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 7, 1966, 63

TOPIC TAGS: office machine, engineering instrument

ABSTRACT: This Author Certificate presents an ellipsograph containing an immobile plate with a longitudinal hole. The plate supports a revolving rod (crankshaft) hinged to another rod (rocker), the free end of which moves in the longitudinal hole of the immovable plate. The instrument also contains a movable writing device. To increase the drafting accuracy, the ellipsograph carries a third rod to which a ruler is hinged (see Fig. 1).

Fig. 1. 1 - immovable plate; 2 - revolving shaft (crankshaft); 3 - the second shaft (rocker); 4 - movable writing device; 5 - the third rod; 6 - ruler

One end of this rod is also hinged to the rocker and the other end slides freely in the hole within the plate. The writing device is mounted on the ruler. Orig. art. has: 1 figure.

Card 1/1 vmb SUB CODE: 13/ SUBM DATE: 18May64 UDC: 744.345.3

PLAVIN, B.; AUSKER, D.

Combined closet and drying room. Stroitel' 9 no.2:27-28 F '63.
(MIRA 16:2)
(Drying apparatus)

AUSKOVA M.

181T16

CZECHOSLOVAKIA/Chemistry - Pharmaceuticals Dec 50

"Biological Properties of Substituted Derivatives of o-Aminoazotoluene," J. Rerabek, M. Auskova, and others, Inst Gen Biol, Med Faculty, Charles U; Biol Lab, Chem Res Inst of Natl Czech Chem Works

"Casopis Ceskeho Lekarnictva" Vol LXIII, No 9-12, p 286

Studies effect of derivs of o-aminoazotoluene, methylaminoazobenzene, etc., on epithelium cell multiplication and microbe growth. Hydrophilism increase does not affect epithelization; 181T16

CZECHOSLOVAKIA/Chemistry - Pharmaceuticals (Contd) Dec 50

increase in soly may. Bacteriostatic effect connected with affinity of aminoazotoluene derivs to aqueous solvents. Introduction of sulfonamide components does not affect epithelization, but increases bacteriostatic action. Water-sol prepns with affinity to lipoids have better therapeutic properties. Methylation affects epithelization, but not bacteriostaticity. Azo linkage inhibits microbe growth.

181T16

AUSLANDER, Al., ing.; GEORGESCU Gorjan, St., ing.

Development in construction mechanization. Pt. 2. Rev constr si mat constr 16 no.9:463-466 S '64.

1. Head of Technical Department, State Committee for Constructions, Architecture, and Town Planning (for Auslander). 2. Head of Laboratory, Institute of Building Research and Construction Economics (for Georgescu Gorjan).

AUSLANDER, Al., ing.

Technical plan, a factor of progress in constructions. Constr Buc 16 no. 748:1,3 9 May '64.

1. Head, Technical Section, State Committee for Constructions, Architecture, and Systematization.

AUSLANDER, Al., ing.; GEORGESCU-GORJAN, St., ing.

Development of construction mechanization. Pt.1. Rev constr si mat constr 16 no.8:437-442 Ag '64.

1. Head of Technical Section, State Committee for Constructions, Architecture, and Town Planning (for Auslander). 2. Head of Laboratory, Institute of Building Research and Construction Economics (for Georgescu-Gorjan).

RUMANIA/General and Specialized Zoology - Insects. P.

Abs Jour : Ref Zhur - Biol., No 9, 1958, 40027

Author : Niculescu, E., Konig, Fr., Auslander, D., Regenstreif, M.
Inst : -
Title : The Morphologic and Ecologic Study of the Larva, Pupa and Imago.

Orig Pub : Byul. stiint. Acad. RPR. Sec. biol. si stiinte agric., 1956, 8, No 3, 599-630.

Abstract : A detailed morphologic description (with many sketches) of the moth Ch. palustris and its way of life are given. The ecology of the larvae and the variety in their behavior depending on the nature of the moisture of the soil on which their feeding plants grow, are given.

Card 1/1

AUSLANDER, D. - HELIWING, S.

Study on variability and biology of the birch mouse (Sicista subtilis nordmanni Keys. et Blas. 1840). In German. p. 255.

Bucharest. Muzeul National de Istorie Naturala "Grigore Antipa." TRAVAUX. Bucuresti, Rumania. Vol. 1, 1957

Monthly list of East European Accessions (EEAI) LC Vol 8, No. 6, June 1959
Uncl.

AUSLANDER, D.

RUMANIA/Magnetism - Ferromagnetism F-4

Abs Jour : Ref Zhur - Fizika, No 5, 1958, No 10805

Author : Maxim, I., Auslander, D., Stan V.
Inst : Not Given
Title : Variation of the Curie Points of Ni-Cu-Sn Alloys

Orig Pub : Studii si cercetari fiz. Acad. RPR, 1957, 8, No 2, 143-145

Abstract : An investigation was made of the variation of the Curie points as a function of the concentration of non-magnetic metals at two fixed ratios of the concentrations of copper and tin, namely Cu:Sn=4 and Cu:Sn=1/2. It was found that the variation is linear and that the slope of the lines depends on the average valence of the non-magnetic metals namely n=1.6 and respectively n=3.

Card : 1/1.

AUSLANDER, D.; CONSTANTIN, E.; SZOCS, J.

Conductibility modification of electrolyte solutions by ultrasound. Studii fiz tehn Iasi 14 no.1:199-202 '63.

AUSLANDER, D.; CONSTANTIN, E.;

Some causes modigying the electric conductibility of solutions diluted electrolytically by ultrasound. Studii cerc fiz 14 no.6:747-754 '63.

1. Universitatea "Babes-Bolyai", Cluj.

RUMANIA

576.852.211:615.84

AUSLANDER, D., POP, E., BUZILA, A., VERESS, E., and ARDEVAN, A. Work performed at the Three-Year Pedagogical Institute (Institutul Pedagogic de 3 Ani) and the "Babes-Bolyai" University (Universitatea 'Babes-Bolyai"), Cluj.

"The Action of Ultrasound on Koch bacillus."

Bucharest, Microbiologia, Parazitologia, Epidemiologia, Vol 11, No 6, Nov-Dec 66, pp 549-557.

Abstract [Authors' English summary modified]: The authors studied the effects of sound fields with a total power of 150 to 250 watts at constant temperature on cultures of Koch bacilli dispersed in normal saline from a solid Loewenstein-Jensen medium. The dissemination of the bacilli in the dispersion media was also studied, as were their frequency, the proportion of live bacilli to the initial amount, cultivation characteristics in solid and liquid media, development of the germs under the activity of ultrasound waves and in the presence of antibiotics. Among the conclusions were that ultrasound brings about a numerical reduction of the bacilli but does not change their basic characteristics.

Includes 8 figures, 4 tables and 8 references, of which 4 German and 4 French. -- Manuscript submitted 29 September 1965.

1/1

COUNTRY : RUMANIA H
CATEGORY : Chemical Technology. Chemical Products and Their Applications. Chemical Processing of*
ABS. JOUR. : RZKhim., No. 23 1959, No. 83596

AUTHOR : Auslander, G.
INST. : -
TITLE : Liquid Density at the Boiling Point and the Characterization Factor

ORIG. PUB. : Petrol. si gaze, 1958, 9, No 5, 227-229

ABSTRACT : The dependence between liquid density at boiling point (d_f) and "characterization factor" (K_o) is presented. Formula for calculation K_o is given. The established dependence is found useful in the determination of the presence and quantity of paraffine wax in petroleum fractions. --I. Rozhkov

*Natural Gases and Petroleum. Motor and Rocket Fuels. Lubricants.

CARD: 1/1

AUSLANDER, G.

Investigation methods for studying cracking catalyzers. p. 156.

PETROL SI GAZE. (Asociatia Stiintifica a Inginerilor si Tehnicienilor din Romania si Ministerul Industriei Petrolului) Bucuresti, Rumania Vol. 10, no. 4, Apr. 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 8 no. 8, Aug. 1959

Uncl.

AUSLANDER, G., ing.

Thermal cracking of asphalt fuel oil. Petrol si gaze 12 no.6:269-272 Je '61.

1. Petrochim, Ploiesti.

L 33082-66

ACC NR: AP6021593 SOURCE CODE: RU/0007/65/016/008/0465/0467

AUTHOR: Auslander, Gh. (Engineer)

38

B

ORG: none

TITLE: Surface tension of binary mixtures at the boiling point

SOURCE: Petrol si gaze, v. 16, no. 8, 1965, 465-467

TOPIC TAGS: surface tension, critical point, specific density, fluid property

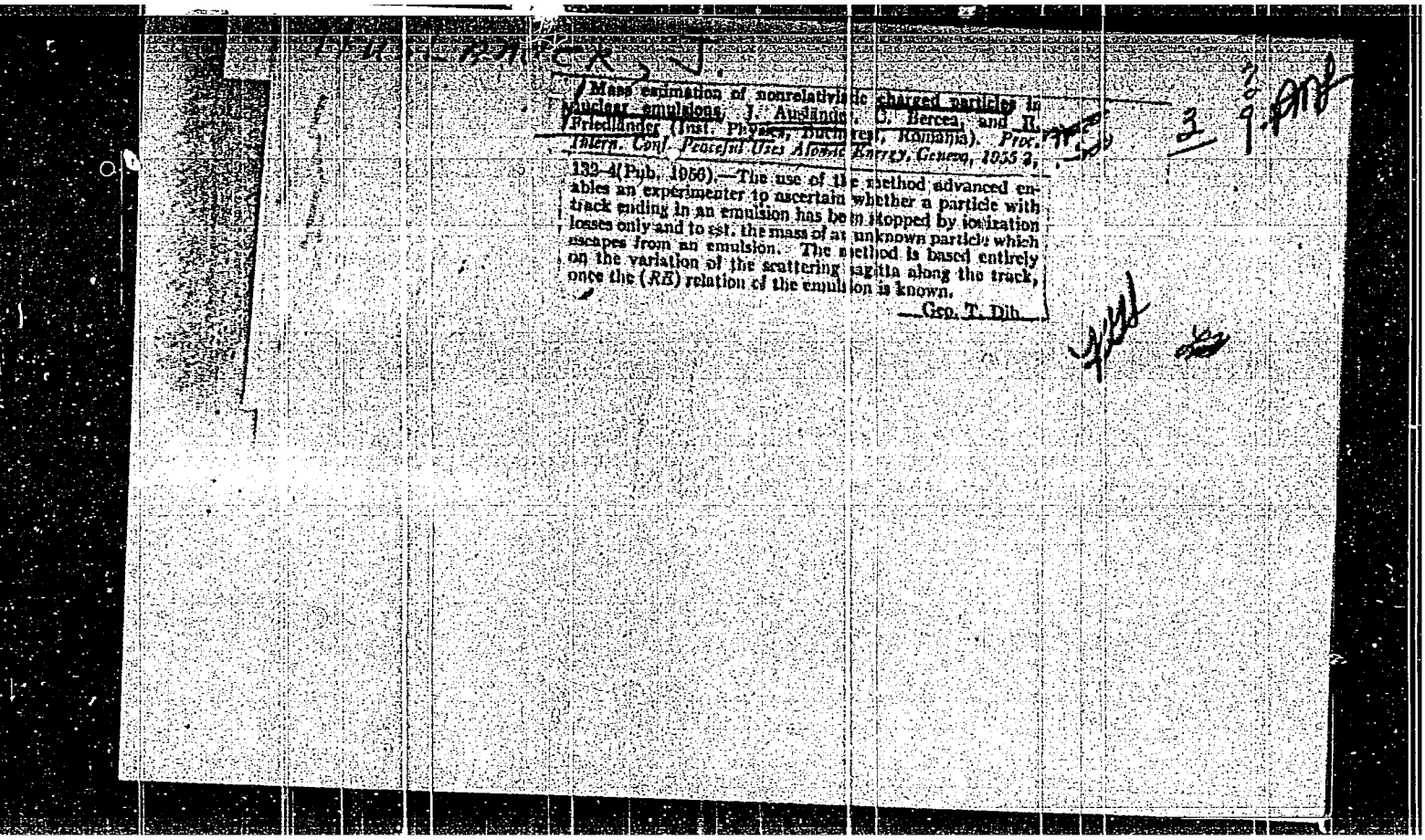
ABSTRACT: Extending the recent work of Crawford and van Winkle on the surface pressure of binary mixtures at the boiling point, the author finds that the surface tension, boiling point and specific gravity of such a mixture can be correlated very simply through an equation involving three constants specific for a given mixture. An additivity rule for nonpolar binary and ternary mixtures is also elaborated. Orig. art. has: 1 figure, 7 formulas and 5 tables. [Based on author's Eng. abst.] [JPRS: 33,544]

SUB CODE: 20 / SUBM DATE: none / OTH REF: 001

Card 1/1

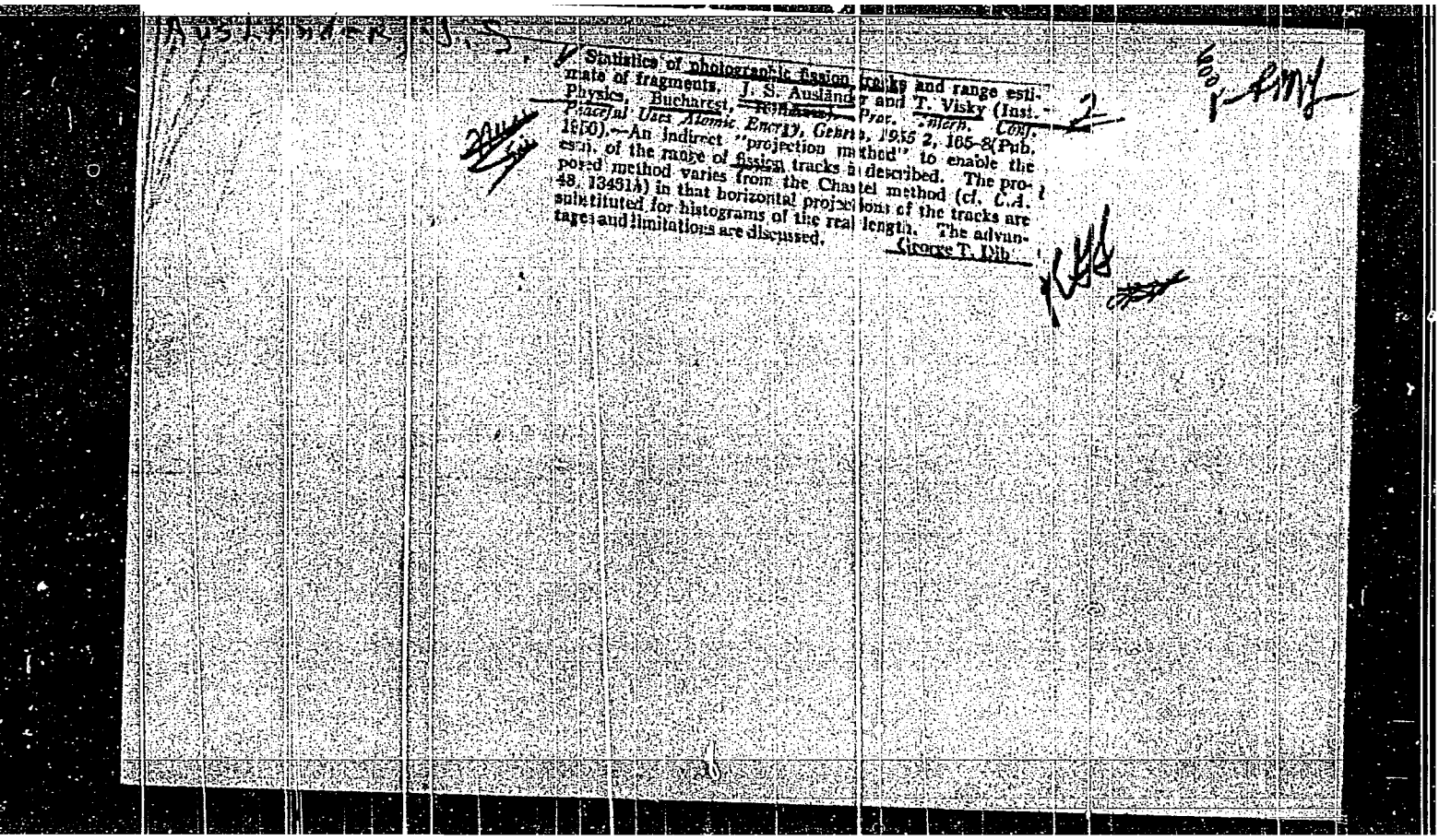
UDC: 532.612:571.123.2.03

0715 2226



Mass estimation of nonrelativistic charged particles in nuclear emulsions. J. Auslander, G. Bercea and H. Friedländer (Inst. Physics, Bucharest, Romania). *Proc. Intern. Conf. Peaceful Uses Atomic Energy, Geneva, 1955* 2, 132–4 (Pub. 1956).—The use of the method advanced enables an experimenter to ascertain whether a particle with track ending in an emulsion has been stopped by ionization losses only and to est. the mass of an unknown particle which escapes from an emulsion. The method is based entirely on the variation of the scattering sagitta along the track, once the (*RS*) relation of the emulsion is known.

—Gisp. T. Dih.



Statistics of photographic fission tracks and range esti-
mate of fragments. I. S. Ausländer and T. Visky (Inst.
Physics, Bucharest, Romania). *Proc. Intern. Conf.
Peaceful Uses Atomic Energy, Geneva, 1955* 2, 165-8 (Pub.
1956).—An indirect "projection method" to enable the
estn. of the range of fission tracks is described. The pro-
posed method varies from the Chastel method (*cf. C.A.*
48, 13431h) in that horizontal projections of the tracks are
substituted for histograms of the real length. The advan-
tages and limitations are discussed.
—George T. Dib

AUSLANDER, J.

Determination of the mass of a charged particle which passes through a nuclear emulsion without being stopped. J. Auslănder, C. Berceа, and E. Friedländer. *Comun. Acad. Rep. Populare Romîne* 5, No. 2, 34[illegible]-7(1955); cf. A. Beiser, *C.A.* 47, 3705*h*.—By measuring the av. value $\bar{\alpha}$ of the diffusion parameter for 2 portions with the lengths Δ_0 and Δ_1 of the track of a nonrelativistic particle, which is not stopped in the emulsion, one can det. the remaining paths R_0 and R_1 ($R_0 = R_1 + L$, where L is the distance between the centers of Δ_0 and Δ_1) which are valid for an infinite emulsion; thus, one may det. the mass of the particle. The corresponding formulas are derived. The method has been verified by exposing emulsions G5 and NT-4 to cosmic rays, and by detg. the mass of the particles by independent means. If the tracks are not too short, the calcd. and observed results agree nicely, as can be clearly shown for the cases of a proton and of a deuteron. One measures actually values σ_0 and σ_1 of lengths C_0 and C_1, which are displaced with respect to the true segments Δ_0 and Δ_1, but the error committed this way can be eliminated by a simple calcn. Werner Jacobson

AUSLANDER J.

Function of distribution of the length of horizontal projections of photographic traces of bipartition and determination of the itinerary of fragments. p. 1293. Academia Republicii Populare Romine. COMUNICARILE Bucuresti. Vol. 5, no. 6, June 1955.

SOURCE: East European Accessions List (EEAL) Library of Congress, Vol. 5, no. 9, Sept. 1955.

AUSLANDER, J.

Determination of the contraction factor of thick photographic emulsions. p. 545. Academia Republicii Populare Romine. Institutul de Fizica. STUDII SI CERCETARI DIZICA. Bucuresti. Vol. 6, no. 3, July/Sept. 1955.

So. East European Accessions List Vol. 5, No. 9 September, 1956

AUSSLAENDER, J.S.

Rumania/Nuclear Physics - Instruments and Installations. Methods of Measurement and Investigation C-2

Abst Journal : Referat Zhur - Fizika, No 12, 1956, 33890

Author : Ausslaender, J. S. and Visky, T.

Institution : None

Title : Histogram of Horizontal Projection of Fission Fragments in Thick-Layer Photographic Emulsions as a Method of Determining Their Range

Original Periodical : Studii si cercetari fiz., 1955, 6, No 4, 699-732 (Rumanian; resumes in Russian and French)

Abstract : With respect to the ranges of 2 fission fragments, the region to which the method suggested in this work can be applied is at least as extensive as the region of applicability of the method of effective length. The accuracies of the 2 methods are of the same order of magnitude. The method proposed by the author is much simpler as it does not presuppose a knowledge of either the shrinkage factor or the vertical projections. Furthermore, the

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Rumania/Nuclear Physics - Instruments and Installations. Methods of Measurement and Investigation C-2

Abst Journal : Referat Zhur - Fizika, No 12, 1956, 33890

use of this method does not require the performance of operations that are difficult from the point of view of experimental accuracy, such as superimposing the Gauss curves on the histogram or determining the point of flexure or its abscissa.

Card 2/2

Auslander, J.

RUMANIA/Physical Chemistry- Thermodynamics, Thermochemistry, Equilibria, Physical-Chemical Analysis, Phase Transitions. B-8

Abs Jour: Referat. Zhurnal Khimiya, No 2, 1958, 3764.

Author : J. Auslander, Iulia Georgescu.
Inst :
Title : Pressure of Polonium Vapor at Room Temperature.

Orig Pub: Studii si cercetari fiz., 1957, 8, No 1, 17-23,

Abstract: The preliminary results of experiments with thick layer photographic plates show that the value of polonium vapor pressure at room temperature is a magnitude of the order of $0.5 \cdot 10^{-14}$ mm of mercury column.

Card : 1/1.

KHULUBEY, Kh. [Hulubei, H.]; AUSLENDER, Y. [Auslander, I.]; FRIDLENDER, E. [Friedlander, E.]; TSITSEYKA, Sh. [Ţiţeica, S.]

Angular distribution of μ-mesons in $\pi \to \mu$-decay. Zhur.eksp.i teor.fiz. 42 no.1:303-304 Ja '62. (MIRA 15:3)

1. Institut atomnoy fiziki Rumynskoy akademii nauk, Bukharest.
(Mesons—Decay)

AUSLENDER, G. [Ausländer, G.] (Ployeshti, Rumyniya); KERIMOVA, M.K. [translator]

Expansion of a function into a series and its resolution into continued fractions. Zhur. vych. mat. i mat. fiz. 3 no.3: 565-568 My-Je '63. (MIRA 16:5)
(Series) (Functions) (Fractions, Continued)

AUSLENDER, L.B., kandidat meditsinskikh nauk

Significance of health education in the organization of therapeutic and protective systems in children's polyclinical wards. Pediatriia no.1:75-79 Ja-F '55. (MLRA 8:5)

(HEALTH, education,
in pediatrics)
(PEDIATRICS,
health educ. in)

39154
S/120/62/000/003/018/048
E192/E382

9.2590

AUTHORS: Auslender, V.L., Il'in, O.G. and Shenderovich, A.M.

TITLE: Generation of current pulses of variable duration

PERIODICAL: Pribory i tekhnika eksperimenta, no. 3, 1962, 81 - 83

TEXT: A method of generating current pulses of continuously variable duration by means of a delay line is described. The principle of the method is illustrated in Fig. 1. The forming line is charged from a voltage source U and it is terminated by a resistance R via a discharge device P_1 at one end and the load-resistance Z at the other end; R is equal to the wave impedance ρ of the line. The operation of the system is as follows. Assuming that the load Z (either ohmic or reactive) is small in comparison with ρ, the current flowing across Z when P_2 is conducting is approximately equal to U/ρ. This current flows until the instant when a negative current wave $U/2\rho$ of negative polarity reaches the load from the matched end of the line after triggering the device P_1.

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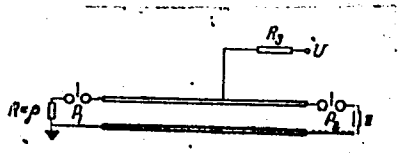
S/120/62/000/003/018/048
Generation of current pulses E192/E382

A current pulse having an amplitude U/ρ and duration equal to the transit time τ of the wave along the line is thus formed on the load. If the instant of triggering of one of the discharge devices with respect to the other is varied from 0 to $\pm\tau$, the electrical processes in the line are not changed but the duration of the current pulse at the load end of the line is varied from 0 to 2τ. There are 4 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN UkrSSR
(Physicotechnical Institute of the AS UkrSSR)

SUBMITTED: November 25, 1961

Fig. 1:



Card 2/2

AUSLENDER, V.L., GRISHAYEV, I.A., ILIN, O.G., SHENDEROVICH, A.M.

"Arrangement for acculmulation electrical system with the energy of 100 MEV."

Report submitted to the Intl. Conf. on High Energy Physics and Nuclear Structure, Geneva, Switzerlnad 25 Feb - 2 Mar 1963

AUSLENDER, V.L., ILIN, O.G., SHENDEROVICH, A.M.

"Forming impulses in variable loading."

"Forming impulse currents of regular duration."

"Selection of optimal conditions for electric lead with energy of 100 MEV in aeculmulation systems."

Reports submitted to the Intl. Conference on High Energy Physics and Nuclear Structure, Geneva, Switzerland 25 Feb- 2 Mar 1963

AUSLENDER, V.L.; IL'IN, O.G.; SHENDEROVICH, A.M.

Pulse formation in a variable load. Prib. i tekh. eksp. 8 no.2:173-174 Mr-Ap '63. (MIRA 16:4)

1. Fiziko-tekhnicheskiy institut AN UkrSSR.
(Pulse techniques (Electronics))

24C

L 47304-65 EWT(m)/EPA(w)-2/EWA(m)-2 Pab-10 IJP(c) GS
ACCESSION NR: AT5007921 S/0000/64/000/000/0274/0287 66 64 B+1

AUTHOR: Bayyer, V. N.; Blinov, G. A.; Bondarenko, L. N.; Yerozolimskiy, B. G.; Koroboynikov, L. S.; Mironov, Ye. S.; Naumov, A. A.; Onuchin, A. P.; Panasyuk, V. S.; Popov, S. G.; Sidorov, V. A.; Sil'vestrov, G. I.; Skrinskiy, A. N.; Khabakhpashev, A. G.; Auslender, V. L.; Kiselev, A. V.; Kushnirenko, Ye. A.; Livshits, M. A.; Rodionov, S. N.; Synakh, V. S.; Yudin, L. I.; Abramyan, Ye. A.; Vasserman, S. B.; Vecheslavov, V. V.; Dimov, G. I.; Papadichev, V. A.; Protopopov, I. Ya.; Budker, G. I.

TITLE: Colliding electron-electron, positron-electron, and proton-proton beams

SOURCE: International Conference on High Energy Accelerators. Dubna, 1963. Trudy. Moscow, Atomizdat, 1964, 274-287

TOPIC TAGS: high energy interaction, high energy plasma, particle physics, particle beam, charged particle beam

ABSTRACT: In the Institute of Nuclear Physics, Siberian Department, Academy of Sciences SSSR, programs on high-energy particle physics are mainly concerned with work on colliding charged particle beams. The Institute considers it unsuitable

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L 17308-65
ACCESSION NR: AT5007921

for its purpose to install huge accelerators whose construction requires large resources outlaid and long time. For work on colliding electron-electron, positron-electron, and proton-proton beams, three installations are being built, which are in various stages of readiness. Work on colliding electron beams was conducted at the institute (then a laboratory of the Institute of Atomic Energy imeni I. V. Kurchatov) in the Fall of 1956, after Kerst's report on accelerators with colliding proton beams of the FFAG type. By that time Soviet scientists had already acquired some experience in obtaining large electron currents; in particular, the mentioned laboratory had installed and then abandoned a device for the spiral storage of electrons (G. I. Budker and A. A. Naumov, CERN Symposium, 1, 76 (1956)), by which, subsequently, circulating currents of the order of 100 amperes were obtained. In 1957 two variants of this device were considered at the same time. The first one consisted of two accelerators with spiral storage and subsequent transition of the particles to synchrotron state in comparatively narrow paths. The second one had storage rings with constant magnetic field and frequent external injection because of the damping of the oscillations under the action of radiation. The first variant was more cumbersome; the second variant contained an element not developed at that time, namely a 100-kilovolt commutator of 10 kilo-amperes with nanosecond front. At the end of 1957, the first positive results were obtained

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L 47304-65
ACCESSION NR: AT5007921

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with a packing discharger of 100 kilovolts, and work stopped on the variant with storage rings. Originally it was proposed to set up two devices: VEP-1 of 2 × 130 Mev energy, and VEP-2 of 2 × 500 Mev energy. The VEP-1 was considered as an actual model of an accelerator and as a device for conducting initial experiments at low energies. After the Panofsky report in 1958 on his work with colliding electron beams conducted in his laboratory at Stanford, construction ceased on 500-Mev storage paths and work was continued on the 2 × 130-Mev installation. Instead of work on colliding electron beams with energies of 500 Mev, work at the end of 1958 was conducted with colliding positron-electron beams and the planning of the VEPP-2 device was begun, whose main elements are a strong-current electron accelerator and a high-vacuum storage path of 700 Mev energy. At the present time the VEP-1 and VEPP-2 are installed in Novosibirsk. The VEP-1 is in a state of neglect, but at the end of 1964 experiments will be begun with it. Installation of the VEPP-2 has been completed. To obtain a marked effect from the application of colliding proton beams, an accelerator is needed with an energy of at least 10 Gev. Since the ordinary accelerator at such energies is a very bulky machine, it was decided to combine the idea of colliding proton beams with the creation of an iron-less impulse accelerator with very large fields and a neutralized central busbar. This latter work of creating such a machine was reported by the authors at a Moscow conference

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L 47304-65
ACCESSION NR: AT5007921

held in 1956. The presence of a field with two directions in an iron-less accelerator with central busbar permits the acceleration of protons toward opposite sides in one machine, which makes possible the collision of protons in case of a suitable race-track. At the present time the Institute is developing a proton device with a magnetic field of about 200 kilogauss and radius of 2 meters for a particle energy of 12 Gev in the beam (equivalent energy is around 300Gev). Tests are being conducted on models, and an effective method of injection by overcharging of negative ions is under study. Also under development are an impulse electric power supply system of 100 million joules capacity and an hf power supply. Since 1958 the Institute has been conducting theoretical investigations on the limits of applicability of quantum electrodynamics [V. N. Bayyer, ZhETF, 37, 1490 (1959), and UFN, 78, 619 (1962)] for the calculation of the radiational corrections to the electrodynamic cross-sections [V. N. Bayyer and S. A. Kheyfets, ZhETF 40, 613-715 (1961) and Nuclear Physics (in print)], and on other problems of high-energy particle physics that are connected with the preparation of experiments on colliding beams [V. N. Bayyer, I. B. Khriplovich, V. V. Sokolov, and V. S. Synakh, in ZhTF, 1961]. The present report takes up under the mentioned three main headings the following pertinent topics: the accelerator-injection, storage paths, electron-optical channel,

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L 47304-65

ACCESSION NR: AT5007921

input and output system, experiments on storage, proposed work, experimental set-up, physical layout of magnets, power supply, etc. Orig. art. has: 8 figures.

ASSOCIATION: Institut yadernoy fiziki SO AN SSSR (Institute of Nuclear Physics, SO AN SSSR)

SUBMITTED: 20May64 ENCL: 00 SUB CODE: EE, NP

NO REF SOV: 012 OTHER: 003

Card 5/5

L 25793-66 EWT(m) IJP(c)

ACC NR: AP6016377 SOURCE CODE: UR/0089/65/019/006/0502/0505

AUTHOR: Auslender, V. L.; Blinov, G. A.; Budker, G. I.; Karliner, M. M.; Kiselev, A. V.; Livshits, A. A.; Mishnev, S. I.; Naumov, A. I.; Panasyuk, V. S.; Pestov, Yu. N.; Sidorov, V. A.; Sil'vestrov, G. I.; Skrinskiy, A. N.; Khabakhnashev, A. G.; Shekhtman, I. A.

ORG: none

TITLE: Status report on the VEPP-2 positron-electron storage ring

SOURCE: Atomnaya energiya, v. 19, no. 6, 1965, 502-505

TOPIC TAGS: electron positron pair, electron interaction, synchrotron, electron scattering, luminescence, betatron/B-3M synchrotron

ABSTRACT: The VEPP-2 was designed for electron-positron interaction experiments at energies of 2 X 700 Mev. as reported in the "Proceedings of the International Conference on Accelerators", Dubna, 1963. Work accomplished in the two years following that conference includes the following: start-up of the synchrotron injector, accumulation of large electron currents in the storage ring, study of instability related to the interaction of the beam with the resonator, and the accumulation of positrons. At present the VEPP-2 is being used to study the interaction of two beams and to measure the luminescence from the small-angle positron-electron scattering. An over-all schematic diagram of the VEPP-2 is shown, including its connection to a B-3M synchrotron. The latter operates in light-duty mode at 200 Mev, and its 100 ma output pulse is shorter than 20 nsec. Its energy scattering is less than 2% and pulse repetition frequency is about 3 cycles. The storage ring is a weakly focussing racetrack with four identical rectilinear segments 60 cm long. The equilibrium orbit radius is 150 cm and the aperture is

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L 25793-66

ACC NR: AP6016377 0

8 X 14 cm. One segment of the ring is the experimental working section; the opposite section is a resonator; the remaining two are used to inject electrons and positrons. The experiments made and the operation of the equipment are described in detail. It is noted with interest that when betatron oscillations are excited by individual inflector pulses, most of the initial oscillation amplitude decays in a time interval much shorter than the natural radiation decay time. Orig. art. has: 4 figures. [JPRS]

SUB CODE: 20 / SUBM DATE: none / ORIG REF: 006 / OTH REF: 001

Card 2/2 CC

L 07064-67 EWT(m) IJP(c)

ACC NR: AP6021622 (N) SOURCE CODE: UR/0089/66/020/003/0213/0217

AUTHOR: Auslender, V. L.; Kulipanov, G. N.; Mishnev, S. I.; Naumov, A. A.; Popov, S. G.; Skrinskiy, A. N.; Tumaykin, G. M.

ORG: none

46
B

TITLE: Experimental data on the interaction of beams during collision

SOURCE: Atomnaya energiya, v. 20, no. 3, 1966, 213-217

TOPIC TAGS: electron collision, storage ring, positron, VEP-1 storage ring, VEPP-2 storage ring

ELECTRON BEAM

ABSTRACT: The authors present a preliminary review of results of beam collision effects, obtained with the VEP-1 (electron-electron) storage ring and the VEPP-2 (positron-electron) storage ring. The installations and the main parameters of the beams in the storage rings are presented elsewhere (Atomnaya energiya, v. 19, 498 and 502, 1965; E. K. Zinin et al., present source, p. 220 [Acc. Nr. AP6021624]). Most of the data pertain to the VEP-1 storage ring at colliding beam energies of 43 Mev. The data presented include the diagram of resonances in the working region of the magnetic field, photographs of different spreading effects in the beams, the distribution of the densities of the particles in one beam with and without the collisions with the other beam, the dependence of the electron lifetime on the revolution frequency and on the colliding-beam current, and the dependence of the partial electron lifetime on various factors. The phenomena in the VEPP-2 storage ring were essential-

Card 1/2 UDC: 621.384.612.4

L 07063-67 EWT(m) IJP(c)

ACC NR: AP6021521 (N) SOURCE CODE: UR/0089/66/020/003/0210/0213

AUTHOR: Auslender, V. L.; Karliner, M. M.; Naumov, A. A.; Popov, S. G.; Skrinskiy, A. N.; Shekhtman, I. A.

ORG: none

TITLE: Phase instability of an intense electron beam in a storage ring

SOURCE: Atomnaya energiya, v. 20, no. 3, 1966, 210-213

TOPIC TAGS: storage ring, electron beam, automatic stabilization equipment, phase modulation, electron accelerator/ VEPP-2 storage ring

ABSTRACT: The authors consider radial-phase self-oscillations in storage rings at large beam currents. Conditions for the stability are obtained in the case of arbitrary frequency characteristics of the accelerating system. It is shown that stability conditions derived in earlier studies, stating that it is sufficient to tune the accelerating resonator to a frequency somewhat lower than the generator frequency in order to prevent self excitation of phase oscillations at arbitrarily large beam currents, are not borne out in practice, and that other factors must be taken into account in a more rigorous stability analysis. Allowance is also made for the interaction between the beam and the accelerating system and other elements of the vacuum chamber at harmonics of the electron-bunch revolution frequency. Some results of an experimental investigation of self excitation of phase oscillations in the storage rings of the Institute of Nuclear Physics of the Siberian Department of AN SSSR are

Card 1/2 UDC: 621.384.60

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ACC NR: AP6021621

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presented (VEPP-2). An example where the instability due to the eighteenth harmonic was eliminated is described. The authors thank G. I. Budker for continuous interest and B. A. Lazarenko, A. A. Litvinov, I. K. Sedlyarov, T. P. Starodubtseva, Ye. A. Pirushkin, and G. M. Tumaykin for help with the experiments. Orig. art. has: 5 figures and 14 formulas.

SUB CODE: 20/ SUBM DATE: 22Nov65/ ORIG REF: 004/ OTH REF: 001

Card 2/2 LC

L 05821-67 EWT(m) IJP(c) GD

ACC NR: AT6031468 SOURCE CODE: UR/0000/65/000/000/0001/0012

AUTHOR: Auslender, V. L.; Blinov, G. A.; Budker, G. I.; Karliner, M. M.; Kiselev, A. V.; Livshits, A. A.; Mishnev, S. I.; Naumov, A. A.; Panasyuk, V. S.; Pestov, Yu. P.; Sidorov, V. A.; Sil'vestrov, G. I.; Skrinskiy, A. N.; Khabakhpashev, A. G.; Shekhtman, I. A.

4,4
B+1

ORG: none

TITLE: Present state of research on the VEPP-2 electron-positron ring

26

SOURCE: AN SSSR. Sibirskoye otdeleniye. Institut yadernoy fiziki. Doklady, 1965. Sostoyaniye rabot na pozitron-elektronnom nakopitele VEPP-2, 1-12

TOPIC TAGS: electron, positron, electron positron storage ring, electron beam /B-3M synchrotron, VEPP-2 electron-positron, steradian

ABSTRACT: The VEPP-2 electron-positron storage ring was designed for experiments on the interaction of positrons and electrons with an energy of up to 2 x 700 Mev. It is basically a special type of B-3M synchrotron, and is equipped with an exterior injector, a high-vacuum storage track, a single thread system to extract the electron beam from the accelerator and insert it into the storage ring.

Card 1/2

ACC NR: AP6036038 SOURCE CODE: UR/0057/66/036/011/2064/2068

AUTHOR: Auslender,V.L.; Minchenkov,G.B.

ORG: none

TITLE: Investigation of the desorption of gases from metal surfaces under the action of electron bombardment

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 11, 1966, 2064-2068

TOPIC TAGS: desorption, electron bombardment, metal surface, copper, stainless steel

ABSTRACT: The authors have investigated desorption of gas from copper and stainless steel surfaces under bombardment with 100 to 600 eV electrons. The investigations were conducted in 1963 and 1964. The specimens were in the form of 6 cm diameter closed cylinders with 0.5 cm wall thickness. A tungsten filament within the cylindrical specimen served both to heat the specimen and (apparently) as the source of bombarding electrons. The specimens were cooled by a flux of water or air through cooling tubes. The temperature could be held within 10° C of a selected value between 200 and 500°. The apparatus was continuously pumped at a rate of about 80 liter/sec, and the working pressure was from 10^{-8} to 4×10^{-8} torr. The pressure changes due to the desorbed gas were measured with an Alpert gage. The composition of the desorbed gas was determined with a flight time mass spectrometer. All three investigated metals behaved very much alike as regards desorption of gas under electron

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ACC NR: AP6036038

bombardment. When the metals were not subjected to preliminary outgasing by heat and electron bombardment, the desorption rate was about 8×10^{-3} molecule/electron and was independent of the energy of the bombarding electrons. Preliminary outgasing reduced the desorption rate by an order of magnitude. When the sample was cooled to -196° C the desorption rate varied with the bombarding electron energy and was maximum for an electron energy of about 170 eV. The lowest desorption rates were observed with heated specimens. At a specimen temperature of 400° C the desorption rate was 8×10^{-6} molecule/electron. Most of the desorbed gas was hydrogen and carbon monoxide, and the relative amounts of these two components remained constant with time. The authors thank T.M.Zhdanova and Ye.D.Bender for their assistance with the measurements, and A.A.Naumov and G.A.Blinov for their interest and valuable advice. Orig. art. has: 2 formulas and 5 figures.

SUB CODE: 20 SUBM DATE: 24Aug65 OTH REF: 002

Card 2/2

34021
S/056/62/042/001/045/048
B154/B112

24.6700

AUTHORS: Khulubey, Kh., Auslender, Y., Fridlender, E., Tsitseyka, Sh.

TITLE: Angular distribution of μ-mesons in π-μ decay

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42, no. 1, 1962, 303-304

TEXT: The anisotropy of the angular anion distribution in pion decay was already investigated in Ref. 1 (A. O. Vaysenberg, E. D. Kolganova, Z. V. Minervina. ZhETF, 41, 106, 1961). The aim of the present paper is to give new data, of which only a few were published up to now, and to point out that some conclusions made in Ref. 1 are unfounded from a statistical point of view. Using the same material as for the investigation of the π-μ decay in a previous work (Ref. 3), the authors observed 1734 π-μ-e decay events and obtained the following angular distribution:

Angular interval	0 - 45°	45 - 90°	90 - 135°	135 - 180°
Number of muons	393	412	493	436

The forward-backward ratio $b = -0.143 \pm 0.048$ indicates a deviation from

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Angular distribution of ...

isotropy of 2.98 of the standard errors and is therefore obtained in the case of true symmetry with a probability of less than $3 \cdot 10^{-3}$. The general deviation of the observed distribution from isotropy is measured with the probability $P(\chi^2) = 4.6 \cdot 10^{-3}$. The conditions were the same as those during the detection of pions in τ decay which was also calculated in Ref. 1. General statistics is insufficient for determining the difference between several partial distributions. Thus, in Ref. 1, the ratio π/π is 0.958 ± 0.061 in low-density regions (all "observers") and 0.855 ± 0.052 in high-density regions ("observers" E, F, G). This distinction of material according to the forward-backward ratio obtained by different observers is statistically inadmissible. The authors therefore made the following calculation by the Monte Carlo method. From $\pi/\pi = 0.905$ (corresponding approximately to the result of all "observers" in the high-density region in Ref. 1) they chose seven π-π pairs (seven "observers") and marked those three "observers" who had received the highest asymmetry. The volume of the samples was approximately set equal to the number of muons in the high-density region in Ref. 1. This was repeated ten times. For the ratio π/π, the following results were obtained:

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Angular distribution of ...

All "observers"	0.907 ± 0.015
Four "observers" with the lowest asymmetry	0.982 ± 0.019
Difference	0.075 ± 0.024
Three "observers" with the highest asymmetry	0.826 ± 0.019

There are 4 references: 1 Soviet and 3 non-Soviet. The three references to English-language publications read as follows: Ref. 2. H. Hulubei, J. Auslåander, E. Friedlåander, S. Titeica. Int. Working Meeting on Cosmic Rays, Buchurest, 1959, Acad. RPR, Inst. de Fizică Atomică, Bucureşti, 1960, p. 130. J. Auslåander. Ninth Int. Ann. Conf. on High Energy Physics, Kiev, 1959, Acad. of Science USSR end IUPAP, Plenary Ses. VI-IX, Moscow, 1960, p. 239. Ref. 3. H. Hulubei, J. Auslåander, E. Balea, E. Friedlåander, S. Titeica, Proc. of the 2-nd Int. Conf. on the Peaceful Uses of Atomic Energy, Geneva, 1958, p. 1283. R. L. Garwin et al. Phys. Rev. 108, 1589, 1957.

ASSOCIATION: Institut atomnoy fiziki Rumynskoy akademii nauk Bukharest (Institute of Atomic Physics of the Rumanian Academy of Sciences, Bucharest)

Card 3/4

34021
S/056/62/042/001/045/048
B154/B112

Angular distribution of ...

SUBMITTED: October 10, 1961

Card 4/4

AUSLENDER, Ye. M.

USSR/Medicine - Endocrinology
Medicine - Disease, Etiology and Pathogenesis
Feb 49

"Problems of Endocrinic Diseases," Ye. M. Auslender, Orgn and Methods Dept, Pub Health and Hist of Med Inst, 1½ pp

"Sov Med" No 2

Special meeting on influence of war on endocrinic diseases was held at the Fifth Conference on Studies of Medico-Sanitary Aftereffects of War, 24-26 May 48. Discusses etiology of disease given by conferees, including Prof Rosiyskiy's assumption that mis

PA 46/49T62

USSR/Medicine - Endocrinology (Contd) Feb 49

factors affecting internal secretions are contusions, traumatic disturbances, and psychological reactions. Urges necessity for study of endocrinic diseases.

46/49T62

Auspitz, Antal

LORBER, Leo; AUSPITZ, Antal; NOVAK, Gyorgy

A simple method for quantitative nephelometric determination of the erythrocytes using photocell colorimetry. Kiserletes orvostud. 6 no.3:276-279 May 54.

1. A Nephadsereg Egeszsegugyi Szolgalata.
(ERYTHROCYTES,
count, determ., colorimetric nephelometry)
(COLORIMETRY,
colorimetric nephelometry in determ. of erythrocyte count)

AUSSEM, M. V.

USSR/Mathematics - Metric Spaces 11 Oct 51

"Metric Spaces of n Dimensions Based on the Concept of an Area of m-Dimensional Surfaces," M. V. Aussem, Moscow City Pedagogic Inst imeni V. P. Potemkin

"Dok Ak Nauk SSSR" Vol LXXX, No 5, pp 701-704

Expands the work of Cartan ("Les espaces metriques fondes sur la notion d'aire," Paris, 1933) to the case of n-dimensional spaces that depend on the area of surfaces of any dimension m. This work was completed under the guidance of Prof S. P. Finikov. Submitted 1 Aug 51 by Acad I. G. Petrovskiy.

221T72

AUSSEM, M.V.

Geometry of the Double Integral in Three-Dimensional Space, M.V.Aussem, DAN SSSR, Vol 85, no 2, pp 253-5, Jul 52.

Applies the invariant method of G.F.Laptev and A.M.Vasil'yev to the construction of generalized spaces, with the aim of constructing the geometry of the double integral $\iint F(x,y,z,p,q)\,[dx,dy]$ prevailing on the surface $z=f(x,y)$ where p,q are partial derivatives of $f(x,y)$ with respect to x and y. States that just as in the case of Riemannian and Finsler geometry one can require the invariancy of the geometry relative to infinite groups of point transformations, or rather certain extension in Lie's sense whose structure is according to Cartan. Presented by Acad I.G. Petrovskiy 17 May 52.

252T60

AUSTERLITZ, H.

TECHNOLOGY

Periodical: POZEMNI STAVBY. Vol. 6, no. 10, Oct. 1958.

AUSTERLITZ, H. Experiences with welding reinforcement for industrial buildings. p. 525.

Monthly List of East European Accession (EEAI) LC, Vol. 8, no. 3
March 1959 Unclass.

AUST,K.

Experiences with the spa therapy of postoperative infiltrations at Frantiskovy Lazne. Cesk. gynek. 29 no.3:216-220 Ap'64

1. Leceb. ustav Rudy rijen, Frant. Lazne; vedouci:lekar MUDr. K. Aust.

AUSTERWEIL, L.

Physical and biological characteristics of noise. p. 6. (Epuletgepeszet, Vol. 6, No. 4, 1957, Budapest, Hungary)

SO: Monthly List of East European Accessions (EEAI) LC, Vol. 6, No. 8, Aug 1957. Uncl.

AUSTERWEIL, I.

Conditioning the air of work sites on the basis of temperature sensations.

B. 68 (EPULETGEPESZET) Budapest, Hungary Vol. 6 no 2/3 1957

SO:Monthly Index of East European Acessions (AEEI) Vol. 6 no. 11 November 1957

Austerweil, L.

Reconstruction of the air-conditioning system of Radio Budapest. p. 148

EPULETGEPESZET. (Epitoipari Tudomanyos Egyesulet)
Budapest, Hungary. Vol. 8, no.4, 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 11
November 1959
Uncl.

AUSTER[illegible]L, L.

Automatic control of the air-conditioning and heating system of the Tranzit Warehouse in Csepel. p. 242

EPULETGEPESZET (Epitoipari Tudomanyos Egyesulet.) Budapest, Hungary.
Vol. 8, no. 6, 1959

Monthly list of East European Accession (EEAI) LC Vol. [illegible]
(9, NO. 2, Feb. 1960)

Uncl.

AUSTERWEIL, Lajos

Ventilation and air conditioning in laboratories. Magy ep ipar 11 no.7:310-314 '62.

AUSTERWEIL, Lajos

"Utilizing solar energy for electric power production." Reviewed by Lajos Austerweil. Epuletgepeszet 9 no.3:103-104 '60.

1. "Epuletgepeszet" szerkeszto bizottsagi tagja.

AUSTERWEIL, Lajos

Physical and physiological characteristics of noise.
Epuletgepeszet 6 no.1:6-18 '57.

AUSTERWEIL, Lajos

An account of the Conference on Heating Technology arranged by the Scientific Association of the Building Industry; October 17-20, 1960. Epuletgepeszet 9 no.6:197-198 '60.

1. "Epuletgepeszet" szerkeszto bizottsagi tagja.

AUSTERWEIL, Lajos

Examining current conditions by operator and graphic method. Epuletgepeszet 9 no.6:200-209 '60.

1. "Epuletgepeszet" szerkeszto bizottsagi tagja.

AUSTERWEIL, Lajos

Description of the study entitled "Evaluation of closed areas from the point of view of heat engineering" which participated in the contest arranged by the Ministry of the Construction and which was purchased. Epuletgepeszet 13 no. 1:38 F '64.

1. "Epuletgepeszet" szerkeszto bizottsagi tagja.

AUSTERWEIL, Lajos

Parallel operation of hydraulic machines. Epuletgepeszet 13 no.5: 176 O '64.

1. Editorial board member, "Epuletgepeszet."

AUSZMANN, Laszlo

Agricultural building frame with wood construction. Magy
ep ip 11 no.8:353-357 '62.

ANTIC, MIHAILO

Soil reaction in forest types of the Majdanpek region. Mihailo Antić and Toma Bunuševac. *Glasnik Šumarskog Fak. Univ. Beogradu* No. 5, 75-103(in French, 103-4) (1952).—The following pH ranges are reported: beech forest, 5.14-0.91; oak forest, 4.68-0.24; mixed oak-hornbeam forest, 6.16-0.20; mixed maple-ash forest, 5.44-0.45; and a subgroup beech forest, 4.13-5.30. Also the pH values of soils which have different geological deeper layers were detd. and found to increase with increasing depths of layers.

V. M.

AUTONOVA, G. S.

"Research on the characteristic turbulence of free non-thermal currents, etc.," in book, Conference on applications of gas dynamics, "TRUD" series, Publishing Office of the Academy of Science of the Kazakh SSR, Alma-Ata, 1959.

AUTRATA, R.

"Isolation of polyvinyl acetate."

CHEMICKY PRUMYSL, Praha, Czechoslovakia, Vol. 9, No.3, March 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September 1959.

Unclassified.

AUTRATA, R.

Distr: 4E2c(j)

Block and graft copolymers. I. Determination of chain transfer by polymer in vinyl acetate. R. Autrata and J. Müller (Výzkumný ústav makromol. chemie, Brno). *Collection Czechoslov. Chem. Communs.* 24, 3442-8(1959).—Polymerization of vinyl acetate initiated by 2,2'-azobisisobutyronitrile was studied at 40, 50, and 60°, and the following consts. detd.: the const. of chain transfer by the polymer, $C_P \times 10^4$, 11.2, 10.2, 6.8; the const. of chain transfer by the monomer, $C_M \times 10^4$, 1.32 (1.29), 1.38 (1.29), 1.77 (1.75) (no. in brackets derived from another equation); and the const., δ (ratio of the termination and growth const.), 3.5, 2.7, 1.7 (for the temps. 40, 50, and 60°). The corresponding activation energies were calcd.

M. Hudlický

AUTRATA, Rudolf

Scintillation method in measuring the radioactivity of aqueous solutions of ^{14}C-labelled compounds. Chem listy 58 no. 4:381-400 Ap '64.

1. Institute of Instrument Technology, Czechoslovak Academy of Sciences, Brno.